		NTSB ID: CHI02FA140		Aircraft Registration Number: N827CM	
		Occurrence Date: 05/23/2002		Most Critical Injury: Fatal	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place Anderson		State IN	Zip Code 46011	Local Time 1505	Time Zone CDT
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Schutte		Model/Series Ms. Ryan Special		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
<p>Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:</p> <p>HISTORY OF FLIGHT</p> <p>On May 23, 2002, at 1505 central daylight time, an amateur built Ms. Ryan Special (Berkut), N827CM, was destroyed when it collided with the terrain in Anderson, Indiana, following an inflight separation of the canard. The private pilot was fatally injured and the airplane was destroyed. The 14 CFR Part 91 flight was operating in visual meteorological conditions without a flight plan. The flight originated from Anderson Municipal Airport (AID), Anderson, Indiana, at 1500.</p> <p>Mechanics who were employed by the pilot reported that the pilot had been installing an autopilot system in N827CM and he was taking it up for a test flight when the accident occurred.</p> <p>The air traffic controller on duty at AID reported N827CM taxied to runway 18 and the pilot requested a departure to the south for a test flight. The controller reported that he approved an on course departure and cleared N827CM for takeoff. The controller reported he last observed N827CM about 2 miles south of AID, climbing in a normal attitude.</p> <p>A witness reported that he had just stepped outside at which time he heard the airplane. He reported the airplane was "going down" and the engine did not sound like it was having trouble. The witness said the airplane descended into a field; nose first, in about a 45-degree angle. He stated, "I then looked back to the north and saw what looked like a wing, but for sure part of the plane floating down towards the woods."</p> <p>PERSONNEL INFORMATION</p> <p>The pilot, age 54, held a private pilot certificate with single engine land, multi-engine land and instrument ratings. The pilot held a third class medical certificate dated February 23, 2001. This certificate contained the restriction, "Holder shall possess glasses for near vision while exercising the privileges of his airman certificate." The accident pilot did not hold any maintenance certificates.</p> <p>The pilot's most recent logbook was located. The first entry in this logbook was dated October 13, 1992. The last entry in this logbook is dated January 8, 2002. The logbook shows that 774.3 hours of flight time were carried over from a previous logbook. According to the logbook, the pilot had a total flight time of 1474.5 hours of which 1372 were as pilot-in-command. The logbook showed the pilot had logged 527.9 hours in an EZ airplane, which he owned. In addition, he logged 53.9 hours in Berkut airplanes. The EZ and Berkut airplanes are similar to each other. The pilot logged his first flight in N827CM on October 30, 2001. The logbook shows that he had 9.6 hours of flight time in N827CM as of the last entry.</p> <p>AIRCRAFT INFORMATION</p>					
FACTUAL REPORT - AVIATION					

National Transportation Safety Board

## FACTUAL REPORT

AVIATION

NTSB ID: CHI02FA140

Occurrence Date: 05/23/2002

Occurrence Type: Accident

## Narrative (Continued)

The aircraft was a Ms. Ryan Special (Berkut), serial number 001. The airplane is two-seat, tandem, composite airplane with a canard. The airplane has a pusher propeller and is powered by a 260 horsepower, Lycoming IO-540-C4B5 engine.

The airplane was registered to an individual who resides in Montana. The owner of the airplane reported that he purchased the kit in the spring of 1998. The airplane owner reported that the airplane was assembled in Mt. Comfort, Indiana. In addition to the owner, the accident pilot's company was involved in the assembly of the airplane. According to the logbook, a Designated Airworthiness Representative (DAR) inspected the airframe and engine, and issued the Experimental Amateur-Built Aircraft Operating Limitations Phase II and the Special Airworthiness Certificate on October 29, 2001.

Total time on the airplane could not be determined from either the wreckage or aircraft records. According to the accident pilot's logbooks, he had flown 9.6 hours in N827CM as of January 8, 2002.

The airplane owner reported that the hours required by the operating limitations (25 hours) had not been flown off.

The accident pilot owned a business at the Anderson Municipal Airport. According to the airport manager, the business installed retractable landing gear on airplanes and also assisted builders of homebuilt airplanes in the assembly process. The business was previously located in Mt. Comfort, Indiana.

A mechanic who worked for the pilot reported that when he first saw N827CM in September 2001, the airplane was approximately 95 percent completed. He reported that near the end of November 2001, the airplane was moved to Mt. Comfort where it was test flown. (The pilot's logbook shows the first flight was October 30, 2001.) The mechanic reported the company was moved to Anderson in December 2001. (The pilot's logbook shows N827CM was flown from Mt. Comfort to AID on December 28, 2001.) The mechanic reported that a few more hours were then flown on the airplane and there were no major problems. This mechanic continued to report, "During the week preceding the accident the canard had been off the aircraft to allow access to the back of the instrument panel. [The pilot] had finally received the autopilot and had to do some re-wiring for it. On the day before the accident the canard was on the aircraft but I do not know if the two main bolts were installed. On the afternoon of the 23rd, [the pilot] pushed the aircraft out of the hangar, got in, started the engine and taxied away. We figured he was going up to check out the auto-pilot and would be back shortly." This mechanic reported that the pilot was the only person who had been working on N827CM.

## METEOROLOGICAL INFORMATION

The aviation routine weather report (METAR) at AID showed the following weather conditions existed at 1445.

Wind: 180 degrees magnetic at 10 knots, gusting to 15 knots  
 Visibility: 10 statute miles  
 Sky Condition: Clear  
 Temperature: 24 degrees centigrade  
 Dew Point: 11 degree centigrade  
 Altimeter: 30.03 inches of mercury

## WRECKAGE AND IMPACT INFORMATION

The accident occurred in a harvested cornfield located 1,500 feet south of CR 400 S and west of CR

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## FACTUAL REPORT

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Occurrence Type: Accident

## Narrative (Continued)

300 E in Anderson. The wreckage was scattered in a southeast direction from the main impact point.

A global positioning system (GPS) receiver recorded the position of the main impact point as 40-degrees 02.616' north latitude, 85-degrees 37.633' west longitude.

Inspectors from the Federal Aviation Administration (FAA) Indianapolis Flight Standards District Office inspected the accident site and wreckage. One of the inspectors reported the main impact crater contained the aircraft engine and pieces of the propeller. The main impact crater was approximately 4 feet deep and 10 feet wide. Next along the debris field was a section of the right wing followed by the rear fuselage area and finally the cockpit area, which was approximately 60 feet from the main impact crater. The debris field extended approximately 250 to 300 feet from the main impact crater.

The canard was located 6/10 mile from the main wreckage on a bearing of 13 degrees. The GPS position of the canard was recorded as 40-degrees 03.128' north latitude, 85-degrees 37.532' west longitude. The canard was intact and contained minor damage to the leading edges and to the left tip. Neither of the bolts, which attach the canard to the shear web (bulkhead), were located. A section of the bulkhead, containing one of the imbedded bushings through which the attachment bolt would pass was located. Neither of the attachment tabs on the canard showed any significant damage. The perimeter of the canard skin is attached to the fuselage with screws. The screw holes on the canard were ripped through.


## MEDICAL AND PATHOLOGICAL INFORMATION


An autopsy was performed on the pilot in Muncie, Indiana, on May 24, 2002.


The FAA Civil Aeromedical Institute (CAMI), Oklahoma City, Oklahoma, prepared a Forensic Toxicology Fatal Accident Report. The toxicology results for the pilot were negative for all tests performed with the exception of Ethonal found in muscle tissue. The report states that the Ethonal was formed postmortem.

## ADDITIONAL INFORMATION

According to the aircraft designer, the canard attaches to the bulkhead with the attachment tabs on the forward side of the bulkhead. The canard is then secured with either two-5/16th inch bolts or two-1/4 inch bolts. The bolts pass through the canard attachment tabs, then through the bushings imbedded in the bulkhead. The designer reported there are 12 screws, which fasten the perimeter of the canard to the fuselage; however these screws were not designed to maintain or carry the loads without the bolts installed.

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<b>Landing Facility/Approach Information</b>					
Airport Name	Airport ID:	Airport Elevation Ft. MSL	Runway Used	Runway Length	Runway Width
Runway Surface Type: Unknown					
Runway Surface Condition: Unknown					
Type Instrument Approach:					
VFR Approach/Landing: Unknown					
<b>Aircraft Information</b>					
Aircraft Manufacturer Schutte		Model/Series Ms. Ryan Special		Serial Number 001	
Airworthiness Certificate(s): Experimental (Special)					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? Yes	Number of Seats: 2	Certified Max Gross Wt. 2200 LBS		Number of Engines: 1	
Engine Type: Reciprocating	Engine Manufacturer: Lycoming	Model/Series: IO-540-C4B5		Rated Power: 260 HP	
<b>- Aircraft Inspection Information</b>					
Type of Last Inspection Conditional	Date of Last Inspection 10/2001	Time Since Last Inspection Hours		Airframe Total Time Hours	
<b>- Emergency Locator Transmitter (ELT) Information</b>					
ELT Installed? No	ELT Operated? No	ELT Aided in Locating Accident Site? No			
<b>Owner/Operator Information</b>					
Registered Aircraft Owner  Michael J. Schutte		Street Address 18 September Drive			
		City Missoula	State MT	Zip Code 59802	
Operator of Aircraft  Steven C. Drybread		Street Address 12050 Kingfisher Circle			
		City Indianapolis	State IN	Zip Code 46236	
Operator Does Business As:			Operator Designator Code:		
<b>- Type of U.S. Certificate(s) Held: None</b>					
Air Carrier Operating Certificate(s):					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 91: General Aviation					
Type of Flight Operation Conducted: Flight Test					
<div style="display: flex; justify-content: space-between;"> <span>FACTUAL REPORT - AVIATION</span> <span>Page 2</span> </div>					

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<b>First Pilot Information</b>																																																																																					
Name		City		State	Date of Birth	Age																																																																															
On File		On File		On File	On File	54																																																																															
Sex: M	Seat Occupied:	Principal Profession: Aircraft Mechanic		Certificate Number: On File																																																																																	
Certificate(s): Private																																																																																					
Airplane Rating(s): Multi-engine Land; Single-engine Land																																																																																					
Rotorcraft/Glider/LTA: None																																																																																					
Instrument Rating(s): Airplane																																																																																					
Instructor Rating(s): None																																																																																					
Type Rating/Endorsement for Accident/Incident Aircraft? No				Current Biennial Flight Review? 03/1999																																																																																	
Medical Cert.: Class 3		Medical Cert. Status: Valid Medical--w/ waivers/lim.			Date of Last Medical Exam: 02/2001																																																																																
<table border="1"> <tr> <th rowspan="2">- Flight Time Matrix</th> <th rowspan="2">All A/C</th> <th rowspan="2">This Make and Model</th> <th rowspan="2">Airplane Single Engine</th> <th rowspan="2">Airplane Multi-Engine</th> <th rowspan="2">Night</th> <th colspan="2">Instrument</th> <th rowspan="2">Rotorcraft</th> <th rowspan="2">Glider</th> <th rowspan="2">Lighter Than Air</th> </tr> <tr> <th>Actual</th> <th>Simulated</th> </tr> <tr> <td>Total Time</td> <td>1475</td> <td></td> <td>1239</td> <td>56</td> <td>68</td> <td>88</td> <td>62</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pilot In Command(PIC)</td> <td>1372</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Instructor</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 90 Days</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 30 Days</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 24 Hours</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>							- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air	Actual	Simulated	Total Time	1475		1239	56	68	88	62				Pilot In Command(PIC)	1372										Instructor											Last 90 Days											Last 30 Days											Last 24 Hours										
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Seatbelt Used?		Shoulder Harness Used?		Toxicology Performed? Yes		Second Pilot? No																																																																															
<b>Flight Plan/Itinerary</b>																																																																																					
Type of Flight Plan Filed: None																																																																																					
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<b>Weather Information</b>																																																																																					
Source of Briefing: No record of briefing																																																																																					
Method of Briefing: Unknown																																																																																					

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		Occurrence Type: Accident			


<b>Weather Information</b>					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
AID	1345	CDT	919 Ft. MSL	NM	Deg. Mag.
Sky/Lowest Cloud Condition: Clear				Ft. AGL	Condition of Light: Day
Lowest Ceiling: None			Ft. AGL	Visibility: 10 SM	Altimeter: 30.03 "Hg
Temperature: 24 °C		Dew Point: 11 °C	Wind Direction: 180		Density Altitude: Ft.
Wind Speed: 10		Gusts: 15	Weather Conditions at Accident Site: Visual Conditions		
Visibility (RVR): Ft.		Visibility (RVV) SM	Intensity of Precipitation:		
Restrictions to Visibility: None					
Type of Precipitation: None					

<b>Accident Information</b>					
Aircraft Damage: Destroyed		Aircraft Fire: None		Aircraft Explosion: None	
Classification: U.S. Registered/U.S. Soil					

- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot	1				1
Second Pilot					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers					
- TOTAL ABOARD -	1				1
Other Ground					
- GRAND TOTAL -	1				1

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Administrative Information		
<p>Investigator-In-Charge (IIC)</p> <p>Pamela S. Sullivan</p>		
<p>Additional Persons Participating in This Accident/Incident Investigation:</p> <p>James D King FAA Inspector FAA 8303 W. Southern Avenue Indianapolis, IN 46241</p>		
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